

CAREFUL ANTIBIOTIC USE

Otitis media with effusion does not require antibiotic treatment

OTITIS MEDIA

Differentiating Acute Otitis Media (AOM) from Otitis Media with Effusion (OME):

A tool for promoting appropriate antibiotic use.

Always use pneumatic otoscopy or tympanometry to confirm middle ear effusion

No effusion
Not OME or AOM



Yes effusion present

Signs or symptoms of AOM-including ear pain, fever, and bulging yellow or red TM

Yes

No

AOM

Presence of effusion (always use pneumatic otoscopy or tympanometry) with

signs or symptoms of acute infection (ear pain, fever, or bulging yellow or red TM).



Treatment

Choose narrow spectrum drugs first.

Amoxicillin, especially at high doses (80-90 mg/kg/day)⁵, remains highly effective and is recommended as the first-line antibiotic by most experts.^{2, 3, 4}

Only consider antibiotic prophalaxis for recurrent AOM as defined by > 3 distinct, well documented episodes in 6 months (or > 4 in 12 months).

Residual effusion after AOM normally persists for up to 6 weeks - no evidence of benefit from treatment in these cases.

OME

Presence of effusion (including immobility of the tympanic membrane)
without

signs or symptoms of acute infection.

Nonspecific signs and symptoms (rhinitis, cough, diarrhea) are often present.



Treatment

Antibiotics are not required for initial treatment.5

Meta-analysis of all known studies showed only marginal short term benefit, and no long term benefit (>1 month) of antibiotic treatment.⁶

Share this algorithm with parents. Explain when the risks of using antibiotics outweigh the benefits.

Avoiding unnecessary treatment of OME would save up to 6 - 8 million courses of antibiotics each year.⁵

References

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